

Title (en)

IMPROVED NFC-CHIP READER

Title (de)

VERBESSERTE NFC-CHIP-LESEVORRICHTUNG

Title (fr)

LECTEUR DE PUCE NFC AMÉLIORÉ

Publication

**EP 3439190 A1 20190206 (EN)**

Application

**EP 17184076 A 20170731**

Priority

EP 17184076 A 20170731

Abstract (en)

Near field communication (NFC) is used for banking, access control or identification. The NFC-chip contains data verifying the identity of the holder. The data on an NFC-chip may be read by an NFC-chip reader, such as a bank terminal, boarder control gate or access controlled gate. A development is seen wherein the NFC-chip reader evolves towards a system comprising a online or stand-alone terminal. Depending on the requirements and environment wherein the terminal is operated, this terminal may be trusted or untrusted. If the terminal is trusted, the terminal may require a communication link to a certificate server. If the terminal is untrusted, the terminal requires a link to a server performing all the authentication steps. This server in turn may require a link to a certificate server. A disadvantage of the conventional NFC-chips and NFC-chip readers is that it can be challenging to position NFC-chip readers at arbitrary locations, such as a remote location. A solution is found in a method for communication with an NFC-chip of a user identification document, comprising the steps of: a terminal obtaining protected data from the NFC-chip, wherein obtaining comprises the step of verifying the integrity of the protected data; and a server verifying genuineness of the NFC-chip communicating via the terminal.

IPC 8 full level

**H04B 5/00** (2006.01); **H04L 9/32** (2006.01); **H04W 12/00** (2009.01)

CPC (source: EP US)

**H04B 5/77** (2024.01 - EP US); **H04L 9/0838** (2013.01 - EP US); **H04L 9/3271** (2013.01 - EP US); **H04W 4/80** (2018.02 - EP US);  
**H04W 12/00** (2013.01 - EP); **H04W 12/106** (2021.01 - EP US); **H04W 12/108** (2021.01 - EP US); **H04L 2209/805** (2013.01 - EP US)

Citation (applicant)

- "Machine Readable Travel Documents", 2015
- TR-03110-1 ADVANCED SECURITY MECHANISMS FOR MACHINE READABLE TRAVEL DOCUMENTS AND E DAS TOKEN, 26 February 2015 (2015-02-26)

Citation (search report)

- [A] WO 2016019127 A1 20160204 - NOK NOK LABS INC [US]
- [XA] DAGDELEN ÖZGÜR ET AL: "Security Analysis of the Extended Access Control Protocol for Machine Readable Travel Documents", 25 October 2010, NETWORK AND PARALLEL COMPUTING; [LECTURE NOTES IN COMPUTER SCIENCE; LECT.NOTES COMPUTER], SPRINGER INTERNATIONAL PUBLISHING, CHAM, PAGE(S) 54 - 68, ISBN: 978-3-642-01969-2, ISSN: 0302-9743, XP047428854
- [A] BUNDESAMT FÜR SICHERHEIT IN DER INFORMATIONSTECHNIK: "Advanced Security Mechanisms for Machine Readable Travel Documents and eIDAS Token - ", 26 February 2015 (2015-02-26), XP055405723, Retrieved from the Internet <URL:[https://www.bsi.bund.de/SharedDocs/Downloads/EN/BSI/Publications/TechGuidelines/TR03110/BSI\\_TR-03110\\_Part\\_1\\_V2-2.pdf;jsessionid=FF42AA8C4919811DCD1B35A930658BE6.2\\_cid351?\\_\\_blob=publicationFile&v=1](https://www.bsi.bund.de/SharedDocs/Downloads/EN/BSI/Publications/TechGuidelines/TR03110/BSI_TR-03110_Part_1_V2-2.pdf;jsessionid=FF42AA8C4919811DCD1B35A930658BE6.2_cid351?__blob=publicationFile&v=1)> [retrieved on 20170912]
- [XA] BSI: "German eID based on Extended Access Control v2 - Overview", 20 February 2017 (2017-02-20), XP055362859, Retrieved from the Internet <URL:[https://www.bsi.bund.de/SharedDocs/Downloads/EN/BSI/EIDAS/German\\_eID\\_Whitepaper.pdf?\\_\\_blob=publicationFile&v=5](https://www.bsi.bund.de/SharedDocs/Downloads/EN/BSI/EIDAS/German_eID_Whitepaper.pdf?__blob=publicationFile&v=5)> [retrieved on 20170407]

Citation (third parties)

Third party : inspicos P/S

- FORESTI ET AL.: "WISTP 2016, LNCS 9895", 2016, article MORGNER ET AL.: "Securing Transactions with the eIDAS Protocols", pages: 3 - 18, XP047562145
- ICAO: "Machine Readable Travel Documents - Part 11: Security Mechanisms for MRTDs", DOC 9303, 7TH ED., 2015, XP055651858

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3439190 A1 20190206; EP 3439190 B1 20220420**; CA 3069264 A1 20190207; DK 3439190 T3 20220704; ES 2919973 T3 20220729;  
US 2020169889 A1 20200528; WO 2019025312 A1 20190207

DOCDB simple family (application)

**EP 17184076 A 20170731**; CA 3069264 A 20180727; DK 17184076 T 20170731; EP 2018070442 W 20180727; ES 17184076 T 20170731;  
US 201816629109 A 20180727